

# All you need to know about Clips

## History of ligating clips

Edward Weck, Inc. was the innovator of the modern ligating clip. In 1967 a significant advance from previous ligating clips and cartridges was made by E.C. Wood. He was awarded U.S. Patents #3,323,216 and #3,363,628. The ligating clip system developed by Weck introduced important advantages from previous generations of ligating clips. The Weck "Hemoclip®" ("Hemostatic clip") was manufactured from tantalum and included a radius bend on each of the lateral legs of the clip. These bends were in addition to the center bend available on all previous ligating clip designs. The profile of the pre-formed ligating clip sold by Weck resembles the shape of a horseshoe or barn. The legs of the ligating clip were essentially parallel. One of the patent claims made by Weck was their ligating clip was pre-formed.

The pre-formed clip offered a significant advantage to the surgeon. When the applier jaws were squeezed together the tip closed distally first in a "tip to tip" manner. This feature was strongly endorsed by surgeons. For the first time, a surgeon had the vessel contained within the ligating clip and fully controlled before actual ligation took place. Prior "V" shaped ligating clip designs had a tendency to squeeze the vessel away from the ligating clip as the applier jaws were being closed.

The Weck clips were pre-loaded on a disposable clip cartridge which was ready for immediate use at the surgical site. Tedious hand loading of individual clips onto a cartridge and sterilization of the assembly just prior to the surgical procedure was no longer necessary. The appeal to the nursing staff was obvious. Weck clips are available in 4 different sizes all available in Tantalum, Stainless Steel, and Titanium. 10, 15, and 25 clip cartridges are available.

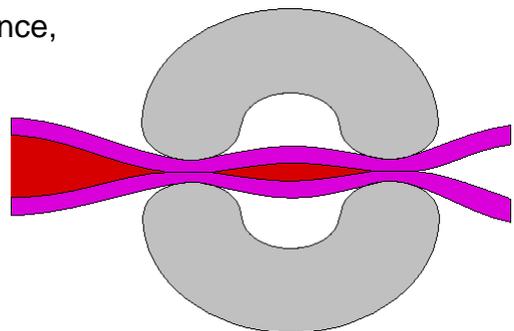
## Ackermann Advantages



Ackermann has the most atraumatic shaped clip in the world market.

Where competition products only seal once, Ackermann clips will give double safety.

Each clip is undergoing a unique surface polishing that will guaranty a unequaled contact with the tissue.



The real message under all circumstances

is: Ackermann provides your customers with a superior ligating clip, and an extremely reliable and cost efficient delivery system.

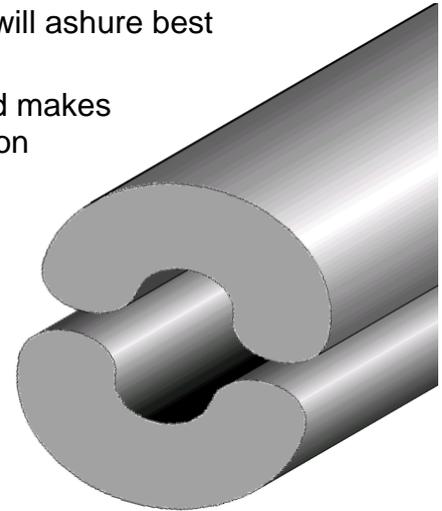
It is not alot more complicated than that. Ackermann is by far the fastest growing ligating clip manufacturer in the world. In some countries Ackermann has already\_become the dominant seller of ligating clips. Ackermann fully expects to become the largest seller of ligating clips in the world.

finest surgical technology

Ackermann<sup>©</sup>

Compared with competition products the rounded surfaces will assure best performance even on weak vessels.

The U-shape all trough the clip gives a better resistance and makes the clip stronger than a square shape used by the competition



A square shaped part will bend much easier than a U shaped component.

The product is Cardiology approved and certificated.

Each cartridge comes with a sticker which will fix the cartridge on the instrument table or the surgeons glove.